UMTS chipsets, and strongly discourage chipset buyers from dealing with Qualcomm's competitors. These practices have the purpose and the effect of protecting Qualcomm from competition on the merits by Broadcom and others.

# E. QUALCOMM'S CONDUCT PRESENTS A DANGEROUS PROBABILITY THAT IT WILL ACHIEVE MONOPOLY POWER IN THE UMTS CHIPSET MARKET

- 135. Qualcomm's efforts to monopolize the UMTS chipset market come at a time when the market is in its relative infancy. Only limited UMTS systems are in place, but the UMTS chipset market is experiencing rapid growth. Qualcomm has stated that only approximately 3 million UMTS or WCDMA cell phones were sold in 2003, that 22 million were sold in 2004, and that that 50 million such phones will be sold in 2005.
- 136. Qualcomm touted that by January 2005 it had already signed UMTS design deals for chipsets and systems software with 26 cell phone manufacturers, including three of the leading UMTS cell phone manufactures, LGE, Samsung, and Siemens, from which Qualcomm has stated it expects 77% sales growth, as well as six of the top seven Chinese manufacturers, from which Qualcomm has stated it expects 126% sales growth. Qualcomm also asserted to the International Trade Commission that its share of sales of UMTS chipsets in the United States is at least 80%.
- 137. As a result of Qualcomm's anticompetitive conduct, Qualcomm's possession of monopoly power in the WCDMA technology markets, and Qualcomm's possession of monopoly power in the CDMA chipset and technology markets, there is a dangerous probability that Qualcomm will obtain monopoly power in the UMTS chipset market, just as it has done in the 2G, 2.5G, and 3G CDMA chipset markets.

# QUALCOMM HAS ABUSED THE STANDARD-SETTING PROCESS FOR GSM/GPRS/EDGE, H.264, IEEE 802.20, AND CDMA 2000 EVDV

138. Qualcomm's abuse of the UMTS standard-setting process is part of a pattern of misconduct by Qualcomm in standard setting. Qualcomm has undertaken this misconduct to

avoid the requirement to disclose potentially essential IPR and to avoid the constraints that SDOs place on holders of purportedly essential IPR once it is incorporated into a standard. This pattern and practice further demonstrates that Qualcomm's abusive conduct in the UMTS standard-setting process was intentional.

#### A. GSM/GPRS/EDGE

- 139. ETSI began work on GSM in 1989. The first version of the GSM standard was released in 1990.
- 140. ETSI released the first version of GPRS in March 1998.
- 141. ETSI released the first version of EDGE in February 1999.
- 142. Substantially the same ETSI IPR policy that applied to UMTS (see ¶¶ 75-84) applied to the development of GSM, GPRS, and EDGE.
- 143. Qualcomm is the assignee of at least 104 patents or patent applications that it now, belatedly, claims are essential to practice GSM, GPRS, and/or EDGE.
- 144. Although Qualcomm had been an ETSI member since 1997 and knew of and monitored ETSI's development of the GSM family of standards, it was not until at least June 4, 2004, that Qualcomm first disclosed to ETSI the patent numbers of any patents that Qualcomm considered essential to practice GSM, GPRS, and/or EDGE.
- 145. By virtue of its participation in ETSI, Qualcomm had an obligation earlier than June 4, 2004, to disclose the patents that it now contends or has ever contended are essential to GSM, GPRS, and/or EDGE. Specifically, Qualcomm had an obligation to disclose the patents that it now contends or has ever contended are essential to GSM, GPRS, and/or EDGE before the aspects of those standards to which those patents are purportedly essential were selected by ETSI. Qualcomm failed to meet this obligation.

- 146. Because Qualcomm failed to disclose its patents until many years after ETSI adopted the GSM, GPRS, and/or EDGE standards, the participants in the ETSI standard-setting process were unable to consider the impact of Qualcomm's asserted patent rights in formulating standards that incorporate technology that Qualcomm now claims read on those patent rights. This distorted the process by which the participants selected among alternative technologies to incorporate in the standards based on considerations of technical merit and intellectual property rights, and allowed Qualcomm unfairly and fraudulently to cause ETSI to adopt standards incorporating technology that Qualcomm now claims reads on its patents.
- 147. Had ETSI participants been made aware by Qualcomm of the patents that it considers essential to the GSM, GPRS, and EDGE standards, they would have had the opportunity to work around those patents, selected alternative technology to meet the particular functions covered by the Qualcomm patent, or taken other measures to protect themselves from exploitation by Qualcomm.
- 148. Qualcomm's disclosure of patents purportedly essential to GSM, GPRS, and EDGE was untimely and in violation of the policies and practices of ETSI, including ETSI's Intellectual Property Rights Policy.
- 149. Qualcomm's nondisclosure was deliberate and intentional.
- 150. After April 1997, ETSI developed all core technical content of the GPRS and EDGE standards.
- 151. One of the factors that ETSI members considered in agreeing to and establishing the technical content of the GPRS and EDGE standards was the quantity, nature, scope, and ownership of IPR disclosed by ETSI participants.

- 152. Members of ETSI and others seeking to practice ETSI standards, including Broadcom, reasonably relied on other ETSI members having complied with ETSI's rules and regulations, including ETSI's Intellectual Property Rights Policy and ETSI's requirement that members license IPR on FRAND terms and on terms that are otherwise in accordance with ETSI's Intellectual Property Rights Policy.
- 153. Broadcom has been a member of ETSI since 1998. Broadcom develops, markets, and sells microchips, chipsets, and software for mobile wireless devices complying with the GSM, GPRS, and EDGE standards.
- 154. Broadcom has made substantial investments to develop and market GSM, GPRS, and EDGE products, including the acquisition of Mobilink Telecom, Inc. in May 2002.
- 155. In November 2003, following its acquisition of Mobilink Telecom, Inc., Broadcom introduced the first EDGE-compliant chip into the U.S. market.
- 156. Broadcom continues today to develop, market, and sell microchips, chipsets, and software for mobile wireless devices complying with the GSM, GPRS, and EDGE standards.
- 157. Qualcomm uses patent infringement actions asserting its patents purportedly essential to GSM, GPRS, and EDGE in order to punish those who seek to challenge its anticompetitive practices in respect of other standards, including in particular its WCDMA licensing practices. Qualcomm filed a patent infringement action against Broadcom on July 11, 2005, ten days after Broadcom filed its original complaint in this action. Qualcomm also filed a patent infringement action against Nokia on November 4, 2005, approximately one week after it was announced that Nokia had filed a similar antitrust complaint with the European Commission.
- 158. Shortly after filing its patent infringement action against Nokia in November 2005,

  Qualcomm made clear that it pursued both that action and its earlier infringement action against

Broadcom in retaliation for Nokia and Broadcom challenging Qualcomm's anticompetitive conduct. On November 11, 2005, Qualcomm's general counsel, Lou Lupin, was quoted in the press assuring others in the market that "We do not have any plans, nor does it seem likely, that we will lodge any similar complaints against other manufacturers" and that "We have followed up on Nokia and Broadcom only because we have other disagreements with the companies."

- 159. Qualcomm has pursued this strategy of selectively asserting its patents purportedly essential to GSM, GPRS, and EDGE in an effort to shield its anticompetitive conduct from challenge, and in furtherance of its monopolization of the WCDMA technology markets and the UMTS chipset market.
- 160. Qualcomm has asserted to companies, including Broadcom and its customers, that products implementing the GSM, GPRS, and EDGE standards require a license to Qualcomm's purportedly essential patents.
- 161. Qualcomm has also asserted to companies, including Broadcom and its customers, that Broadcom does not have a license from Qualcomm to implement the GSM, GPRS, and EDGE standards.
- 162. Qualcomm's claims that Broadcom requires a license to Qualcomm's purportedly essential GSM, GPRS, and/or EDGE patents have injured and continue to injure Broadcom, including by interfering with Broadcom's ability to make sales and reducing Broadcom's profits.
- 163. Qualcomm's refusal to honor its commitments to ETSI to license its purportedly essential IPR on FRAND terms and conditions and in accordance with the other terms of the ETSI IPR policies has injured and continues to injure Broadcom, including by interfering with Broadcom's ability to develop and market semiconductors for GSM, GPRS, and EDGE-compliant mobile wireless devices.

- 164. Qualcomm's misconduct has injured and is continuing to injure competition and consumers in the United States and elsewhere by, among other things, inflating prices for products, including chipsets, that practice the GSM, GPRS, and EDGE standards. Its failure to disclose its patents to ETSI has allowed Qualcomm unfairly and fraudulently to obtain, or claim to have obtained, a monopoly in markets for technology that is incorporated in the GSM, GPRS, and EDGE standards. Through Qualcomm's deceptive conduct, ETSI members were denied critical information for the development of and choice between competing technologies to be incorporated in these standards and Qualcomm was able unfairly and fraudulently to cause ETSI to adopt a standard incorporating technology that Qualcomm now claims reads on its patents.
- 165. Qualcomm's failure to disclose its patent rights to ETSI and its current refusal to offer licenses to its patents that comply with the ETSI requirements has allowed Qualcomm unfairly and fraudulently to obtain or demand monopoly rents and terms from parties practicing the GSM, GPRS, and EDGE standards. Qualcomm deliberately violated the rules of the standard-setting organization designed to prevent such exploitation by patent holders.
- 166. Qualcomm has not offered Broadcom a license to practice the patents that Qualcomm claims are essential to GSM, GPRS, and/or EDGE in accordance with its commitments to ETSI.
- 167. Instead, in willful disregard of its commitments to ETSI, Qualcomm has refused to offer licensing terms that are fair, reasonable, and nondiscriminatory, and has otherwise failed to offer terms that comport to the ETSI licensing requirements.
- 168. Qualcomm has violated its licensing obligations by refusing to provide Broadcom with a license in accordance with the terms of ETSI's IPR policy.
- 169. Because UMTS chipsets must have backward compatibility with GSM, GPRS, and EDGE as previous GSM-path standards, Qualcomm's conduct in GSM/GPRS/EDGE had the

additional effect of reinforcing the effects of Qualcomm's conduct relating to UMTS chipsets. In other words, by wrongly asserting its patents as essential to the GSM, GPRS and EDGE standards, Qualcomm wrongly retarded the use of competitors' UMTS chipsets, including (and especially) Broadcom's.

#### B. H.264

- 170. H.264 is a standard for video compression. It is also known as MPEG-4 Part 10, or Advanced Video Coding ("AVC").
- 171. The SDOs ISO and IEC are involved in setting standards for digital video compression. The Moving Pictures Expert Group ("MPEG") is a joint subcommittee of the ISO and the IEC focused on the coding of audio, picture, and multimedia information.
- 172. The ITU is also involved in setting standards for digital video compression. The Video Coding Experts Group ("VCEG") is a subdivision of the ITU focused on multimedia systems.
- 173. In December 2001, the ITU, through VCEG, and the ISO/IEC, through MPEG, jointly founded the Joint Video Team ("JVT").
- 174. The goal of the JVT was to develop a video coding standard that would improve upon the compression and picture quality provided by prior video coding standards, such as H.263, MPEG-2, and MPEG-4, Part 2.
- 175. The JVT also sought to develop a "royalty free 'baseline' profile . . . in order to promote the wide implementation and use" of the H.264 standard.
- 176. Members of MPEG and members of VCEG are permitted to participate in the activities of the JVT, including the JVT's efforts to develop a new video compression standard.
- 177. The JVT has a wide variety of industry participants, including Nokia, Panasonic, Sharp, Microsoft, LG Electronics, Canon, Motorola, Hitachi, Apple Computer, Intel, Philips, Qualcomm, and Broadcom.

- 178. The first version of the H.264 standard was released in May 2003, and a subsequent version of the H.264 standard was released in March 2005.
- 179. The JVT's work regarding the H.264 standard continues today.
- 180. Qualcomm is a member of MPEG and therefore had the right to participate in the JVT.
- 181. Qualcomm participated in the JVT's development of the H.264 standard beginning at least as early as September 2002.
- 182. Qualcomm's participation included membership in JVT working groups, sponsorship of a JVT meeting, attendance and participation at JVT meetings, and submission of technical proposals to the JVT. Qualcomm continues to participate in the JVT to the present day.
- 183. As a result of its membership and participation in MPEG and the JVT, Qualcomm was and is bound by the JVT Terms of Reference, the JVT Internal Operating Rules, and the IPR disclosure policies of the ITU and the ISO/IEC.
- 184. The JVT's activities are governed by the Terms of Reference for Joint Video Team Activities ("JVT Terms of Reference").
- 185. The JVT's Internal Operating Rules (Annex 3 of the JVT Terms of Reference) require that participants disclose "IPR Information (of their own or anyone else's) associated with any standardization proposal (of their own or anyone else's)" on a "best efforts basis." In addition, the Internal Operating Rules require submission of a "final IPR declaration" to the ITU and the ISO/IEC.
- 186. The JVT Terms of Reference also provide that the IPR disclosure policies of both the ITU and the ISO/IEC are applicable to JVT participants. Both the ITU and the ISO/IEC require participants in the standard-setting process to disclose any patents believed to be essential to the standard.

## 187. The ITU's Patent Policy states:

ITU-T [ITU Telecommunication Standardization Sector] Recommendations are non-binding international standards. Their objective is to ensure compatibility of international telecommunications on a worldwide basis. To meet this objective, which is in the common interests of all those participating in international telecommunications (network and service providers, suppliers and users), it must be ensured that Recommendations, their applications, use, etc. are accessible to everybody. It follows, therefore, that a commercial (monopolistic) abuse by a holder of a patent embodied fully or partly in a Recommendation must be excluded. To meet this requirement in general is the sole objective of the code of practice. The detailed arrangements arising from patents (licensing, royalties, etc.) are being left to the parties concerned, as these arrangements might differ from case to case.

188. The ITU's Guidelines for Implementation of the ITU-T's Patent Policy state:

Any ITU Member State, Sector Member, or Associate aware of a patent or pending patent application held by itself or others, which may fully or partly cover elements of the draft Recommendation(s) proposed for approval, is requested to disclose such information to the TSB, in no case later than the date scheduled for approval of the Recommendation(s) in accordance with ITU-T Patent Policy.

189. The ISO IPR Guidelines state:

The originator of a proposal for a document shall draw the attention of the committee to any patent rights of which the originator is aware and considers to cover any item of the proposal. Any party involved in the preparation of a document shall draw the attention of the committee to any patent rights of which it becomes aware during any stage in the development of the document.

- 190. The members of the JVT understood and treated the language of the JVT's Internal Operating Rules, as well as the policies of the ITU and ISO/IEC, as imposing a disclosure duty.
- 191. Qualcomm claims to own at least two patents, U.S. Patent No. 5,452,104 (the "104 patent") and U.S. Patent No. 5,576,767 (the "767 patent"), that it alleges are essential to practice H.264.
- 192. The invention claimed in the '104 patent concerns the use of multiple discrete cosine transforms to compress data within an adaptive block size system.

- 193. The invention claimed in the '767 patent concerns a specific method of interframe video coding, meaning the compression of a frame of video data based on data present in another frame of video.
- 194. Qualcomm does not currently design or sell any product that implements the inventions claimed in the '104 and '767 patents.
- 195. Qualcomm did not disclose that it owned those or any other patents supposedly essential to practice H.264 to the JVT, the ITU, or the ISO/IEC until April 25, 2006.
- 196. By virtue of its participation in the JVT, Qualcomm had an obligation earlier than April 25, 2006, to disclose the patents that it now contends or has ever contended are essential to H.264. Specifically, Qualcomm had an obligation to disclose the patents that it now contends or has ever contended are essential to H.264 before the aspects of H.264 to which those patents are purportedly essential were selected by the JVT. Qualcomm failed to meet this obligation.
- 197. Because Qualcomm failed to disclose its patents until many years after the JVT adopted the H.264 standard, the participants in the JVT standard-setting process were unable to consider the impact of Qualcomm's alleged essential patent rights in formulating the standard. This distorted the process by which the participants selected among alternative technologies to incorporate in the standard based on considerations of technical merit and intellectual property rights, and allowed Qualcomm unfairly and fraudulently to cause the JVT to adopt a standard incorporating technology that Qualcomm now claims reads on its patents.
- 198. Qualcomm's disclosure of patents purportedly essential to H.264 was untimely and in violation of the policies and practices of the JVT, the ITU, and the ISO/IEC.
- 199. Qualcomm's nondisclosure was deliberate and intentional.

- 200. Qualcomm asserted two of its patents as essential to the H.264 standard in an action against Broadcom filed on October 14, 2005, six months before it disclosed those patents to the JVT.
- 201. Qualcomm's action against Broadcom for infringement of the '104 and '767 patents was tried to a jury in January 2007 in the United States District Court for the Southern District of California.
- 202. On January 26, 2007, after considering the evidence presented to it, the jury found that the accused Broadcom products did not infringe Qualcomm's patents. In addition, the jury issued an advisory verdict finding that Broadcom had proven by clear and convincing evidence that, by its conduct in connection with the JVT, Qualcomm had waived its right to enforce the two patents that it asserted against Broadcom.
- 203. On March 22, 2007, the District Court issued an opinion affirming the jury's advisory verdict that Broadcom had proven by clear and convincing evidence that Qualcomm, by its conduct in connection with the JVT, had waived its right to enforce the two patents that it had asserted against Broadcom.
- 204. The District Court held that, under the principles set forth by the United States Court of Appeals for the Federal Circuit in *Rambus, Inc. v. Infineon Technologies, AG*, 318 F.3d 1081 (Fed. Cir. 2003), there was clear and convincing evidence that JVT participants treated the JVT IPR policies as imposing a duty of disclosure regarding a participant's IPR that may be reasonably essential to practice the H.264 standard.
- 205. In discussing the goals of the IPR policies of the JVT, the District Court noted:

The policy of the JVT Standards Study Committee was to draft a technical standard to optimize and maximize the excellence and compatibility of electronic structures to enable companies all over the world to produce high-quality video compression products with interchangeable properties so that mankind could enjoy the

technology to the utmost. To this end, the JVT sought to minimize the impact on intellectual property and, where it could not be avoided, to facilitate a licensing pool system for sharing royalties for impacted inventions. The participants in the JVT project shared the aims and policies of the JVT and considered themselves obligated to identify IPR owned or known by them, whether or not they made technical proposals for study.

The non-disclosure of a participant's core patents in such a program could put the participant in a position where it could literally block the use of the published H.264 standard by any company unless that company obtained a separate license from the participant.

- 206. The District Court further held that there was clear and convincing evidence that the "104 and '767 patents reasonably may be essential to the practice of H.264 standard" and that Qualcomm had knowledge that the '104 patent and the '767 patent might be necessary to practice the H.264 standard "since at least 2002 and July 2005 respectively."
- 207. The District Court further held that "Broadcom has shown by clear and convincing evidence that Qualcomm participated in the work of the JVT, monitored it with at least four staff engineers, received its correspondence, knew of the area of study, filed at least five study proposals with required IPR forms attached, and knew about its own valuable IPR central to both the resulting H.264 standard versions published in 2003 and 2005 respectively. Yet the '104 and '767 patents were not revealed by Qualcomm before this lawsuit was filed against Broadcom in October 2005."
- 208. The District Court concluded that "on the basis of the law and the totality of circumstances herein, [the] Court finds by clear and convincing evidence that Qualcomm waived its right to enforce the '104 and '767 patents against H.264 products by its silence in the face of a 'clear duty to speak' to identify to the JVT its IPR related to the development of the H.264 standard."

- 209. On August 6, 2007, the District Court issued an opinion setting forth the remedy for Qualcomm's waiver of its right to enforce the '104 and '767 patents. In this opinion, the District reaffirmed its findings that Qualcomm had intentionally failed to disclose its IPR to the JVT. The District Court found that "Qualcomm closely monitored and participated in the development of the H.264 standard, all the while concealing the existence of at least two patents it believed were likely to be essential to the practice of the standard, until after the development was completed and the standard was published." The District Court also held that "Qualcomm sought to unfairly benefit from having subverted the standards-making process of the JVT."

  210. The District Court found "Qualcomm's involvement [in the JVT] to be vigorous participation" and that Qualcomm's "motive for participation" was "to insulate its IPR from the work of the JVT so as to preserve it for unilateral enforcement if that became possible after the H.264 standard was settled upon."
- 211. The District Court likewise found "that Qualcomm and its employees orchestrated a plan to ignore Qualcomm's duty to disclose these patents [the '104 and '767 patents] to the JVT, in order to become an indispensable licensor of the H.264 standard."
- 212. In addition to Qualcomm's misbehavior in the JVT, the District Court found that Qualcomm and its counsel engaged in "aggravated litigation abuse" and explained that its "finding as to Qualcomm's wrongful conduct is further supported by evidence of widespread and undeniable misconduct of Qualcomm, its employees, and its witnesses throughout the present litigation, including during discovery, pre-trial motions practice, trial, and post-trial proceedings."

- 213. Throughout discovery in the litigation, Broadcom repeatedly sought documents and testimony concerning Qualcomm's participation in the JVT and Qualcomm's nondisclosure of its allegedly essential patents.
- 214. As fact discovery progressed, Qualcomm's story regarding its role in the development of the H.264 standard changed numerous times as the facts and documents repeatedly undermined each of its theories.
- 215. First, Qualcomm claimed that it was not a member of the JVT at all, that it had not participated in or sponsored any JVT meetings, and that it had never made a technical proposal to the JVT. As the evidence presented by Broadcom at trial demonstrated, these assertions were not true.
- 216. Second, Qualcomm claimed that, although it had participated in the JVT, such participation did not occur until December 2002, when the technical content of the H.264 standard was purportedly "frozen." Again, this assertion proved untrue.
- 217. Finally, on the eve of trial, Qualcomm advanced yet a third story, claiming that it had disclosed the '104 patent to one of the JVT's parent organizations via letter dated June 8, 2001, to an "MPEG Test Sub-group" in response to a Call for Proposals for Digital Cinema. As with Qualcomm's other assertions, as the evidence developed by Broadcom demonstrated, this third story also proved untrue.
- 218. During trial, based on its contention that no Qualcomm employees participated in the JVT prior to December 2002, Qualcomm sought to exclude from admission into evidence a JVT document containing a list of email subscribers to a JVT ad hoc working group (the so-called "JVT email reflector"), including a Qualcomm employee. In an effort to exclude this document, Qualcomm insisted "there's no evidence that any e-mail was actually sent to this list."

- 219. On January 24, 2007, Qualcomm filed a Motion for Judgment as a Matter of Law seeking to have the Court dismiss Broadcom's waiver defense based, in part, on its assertion that "Broadcom has failed to show that . . . [any Qualcomm employee] ever received a single email related to this list [the JVT email reflector]."
- 220. That same day, during cross-examination in open court of a Qualcomm employee, Broadcom discovered that, contrary to Qualcomm's representations to the Court, Qualcomm possessed twenty-one emails that a Qualcomm employee had received from a JVT working group between September 27, 2002, and March 27, 2003. These emails, which related to various aspects of the development of the H.264 standard, had never been disclosed or produced to Broadcom.
- 221. On January 24, 2007, after Broadcom's cross-examination of the Qualcomm employee and during the Court's mid-day recess, Qualcomm produced to Broadcom the twenty-one emails received by the Qualcomm employee from the JVT working group during the seven-month period from September 2002 through March 2003.
- 222. On January 29, 2007, several days after the jury had returned a verdict, Qualcomm, by letter to the Court, withdrew its statements during trial and in its Motion for Judgment as a Matter of Law asserting that no Qualcomm employee had received any emails from the JVT email reflector.
- 223. Since the conclusion of the trial on January 26, 2007, Broadcom has made numerous attempts to obtain any additional documents concerning Qualcomm's participation in the JVT that may be stored in the electronic archives of Qualcomm employees.

- 224. On April 6, 2007, Qualcomm informed Broadcom that Qualcomm had identified a substantial volume of documents that were responsive to Broadcom's requests for any additional documents concerning Qualcomm's participation in the JVT.
- 225. On April 9, 2007, counsel for Qualcomm informed that Court that Qualcomm would produce a "substantial number of electronic documents" concerning Qualcomm's participation in the JVT. Counsel for Qualcomm further informed the Court that "these documents [have] revealed facts that appear to be inconsistent with certain arguments that [Qualcomm] made . . . [during] trial and in the equitable hearing following trial."
- 226. The same day, Louis Lupin, Qualcomm's Executive Vice President and General Counsel, sent a letter to the Court to "personally convey, on behalf of QUALCOMM Incorporated and the QUALCOMM legal department in particular, [his] regret and apologies regarding the circumstances" surrounding Qualcomm's failure to produce the substantial number of electronic documents concerning Qualcomm's participation in the JVT.
- 227. Four months after trial, Qualcomm eventually produced over two hundred thousand pages of documents related to the JVT and the H.264 standard. The District Court in its August 7, 2007 opinion described these documents as "clearly within the scope of [Broadcom's discovery] requests." The Court found that these late-produced documents "fully bolstered Broadcom's waiver arguments and completely refuted Qualcomm's waiver defenses at trial."
- 228. The District Court found that "Qualcomm counsel participated in an organized program of litigation misconduct and concealment throughout discovery, trial, and post-trial." In light of this misconduct and Qualcomm's intentional refusal to disclose its patents to the JVT, the District Court concluded:
  - [i]n light of all of the above evidence finally revealed, the eventual collapse of Qualcomm's concealment efforts exposes the carefully

orchestrated plan and the deadly determination of Qualcomm to achieve its goal of holding hostage the entire industry desiring to practice the H.264 standard by insulating its IPR from the JVT so that the JVT would lose the opportunity to mitigate, if not avoid, Qualcomm's IPR in the development of the H.264 standard.

- 229. Qualcomm's nondisclosure and refusal to offer FRAND licenses has harmed Broadcom and competition.
- 230. Between December 2002 and April 25, 2006, the JVT made numerous decisions about the content of the H.264 standard. Qualcomm employees participated in those decisions.
- 231. One of the factors that JVT members considered in developing the technical content of the H.264 standard was the quantity, nature, scope, and ownership of IPR disclosed by JVT participants.
- 232. Broadcom is a member of the JVT, and, like other participants in the JVT and others seeking to practice the H.264 standard, reasonably relies on JVT participants having complied with the rules and regulations of the JVT, the ITU, and the ISO/IEC, including the intellectual property rights disclosure policies of those organizations.
- 233. Broadcom develops, markets, and sells microchips, chipsets, and software that can perform video encoding and/or decoding in conformance with the H.264 standard.
- 234. After December 2002, Broadcom made substantial investments to develop and market H.264 products, including the acquisition of Sand Video, Inc., in April 2004, and Alphamosaic, Ltd., in September 2004.
- 235. Following the April 2004 acquisition of Sand Video, Inc. and the September 2004 acquisition of Alphamosaic, Ltd., Broadcom introduced its first H.264-compliant chips into the U.S. market.

- 236. Broadcom continues today to develop, market, and sell microchips, chipsets, and software for devices complying with the H.264 standard.
- 237. Qualcomm has asserted to companies, including Broadcom and its customers, that products implementing the H.264 standard require a license to Qualcomm's purportedly essential patents.
- 238. Qualcomm has also asserted to companies, including Broadcom and its customers, that Broadcom does not have a license from Qualcomm to implement the H.264 standard.
- 239. Qualcomm's claims that Broadcom requires a license to Qualcomm's H.264 patents have injured and continue to injure Broadcom, including by interfering with Broadcom's ability to make sales and reducing Broadcom's profits.
- 240. Qualcomm's refusal to honor its commitments to the JVT, the ITU, and the ISO/IEC to disclose and license its essential IPR on FRAND terms has injured and continues to injure Broadcom, including by interfering with Broadcom's ability to develop and market semiconductors for H.264-compliant devices.
- 241. Qualcomm's failure to disclose its patents to the JVT, the ITU, and the ISO/IEC and its current refusal to offer FRAND licenses to its patents has also injured competition by allowing Qualcomm to obtain or seek to obtain monopoly rents and terms from parties practicing the H.264 standard, when Qualcomm deliberately violated the rules of the standard-setting organization designed to prevent such exploitation by patent holders.
- 242. Qualcomm's misconduct has threatened and continues to threaten to injure competition and consumers throughout the United States and around the world.
- 243. Qualcomm's failure to disclose its patents to the JVT, the ITU, and the ISO/IEC has allowed Qualcomm unfairly and fraudulently to obtain, or claim to have obtained, a monopoly in

the aspects of the H.264 technology markets governed by each element of the standard that Qualcomm claims is covered by its patents. Through Qualcomm's deceptive conduct, JVT participants were denied critical information for the development of H.264. Qualcomm's failure to disclose its patents to the JVT, the ITU, and the ISO/IEC has allowed Qualcomm unfairly and fraudulently to obtain, or claim to have obtained, a monopoly in markets for functionality that is incorporated in the H.264 standard. Through Qualcomm's deceptive conduct, JVT members were denied critical information for the development of and choice between competing technologies to be incorporated in these standards, and Qualcomm was able unfairly and fraudulently to cause the JVT to adopt standards incorporating technology that Qualcomm now claims reads on its patents.

- 244. In its April 25, 2006, disclosure to the JVT, Qualcomm committed "to grant a license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to make, use and sell implementations of" H.264.
- 245. Without conceding that products implementing the H.264 standard infringe Qualcomm's purportedly essential patents, Broadcom requested the terms of a license to practice those patents.
- 246. In willful disregard of its commitments to the JVT, the ITU, and the ISO/IEC, Qualcomm offered terms that were unfair, unreasonable, and discriminatory. For example, Qualcomm has insisted on royalty rates that are substantially in excess of industry norms and refused to provide Broadcom with a license that exhausts Qualcomm's patent rights.

#### C. IEEE 802.20

247. IEEE 802.20 is a standard currently under development for packet-based air interface for Internet Protocol (IP) services. IEEE 802.20 is sometimes referred to as a 4G wireless standard.

- 248. The IEEE 802.20 working group is the body that is developing that standard. The IEEE 802.20 working group is also known as the Mobile Broadband Wireless Access Working Group.
- 249. The Institute of Electrical and Electronics Engineers ("IEEE") approved the establishment of the IEEE 802.20 working group in December 2002.
- 250. The IEEE 802.20 working group endeavored continuously to develop the IEEE 802.20 standard until its operations were suspended in June 2006.
- 251. The IEEE 802.20 working group is governed by the IEEE Project 802 Policies and Procedures, the IEEE 802.20 Operating Rules, and the Policies and Procedures of IEEE Project 802, Working Group 802.20. In addition, the Policies and Procedures of IEEE Project 802, Working Group 802.20 mandate that the ANSI rules for identification of affiliation apply to IEEE 802.20 working group activities.
- 252. The IEEE Project 802 Policies and Procedures prohibit "dominance" of a working group by a single organization or committee.
- 253. In addition, the Policies and Procedures of IEEE Project 802, Working Group 802.20 and the ANSI rules require that participants provide "[t]imely and adequate notice" of "all known directly and materially affected interest" including the "affiliation" of each member. "Affiliation" refers to the "entity that the [participant] represents (which may or may not be that
- 254. Qualcomm employees and agents participated in and were members of the IEEE 802.20 working group.

person's employer)."

255. Broadcom employees and agents also participated in and were members of the IEEE802.20 working group.

- 256. Qualcomm's employees and agents were acting on behalf of Qualcomm, and in concert with it, in their participation in the 802.20 working group, and not in their individual capacity.
- 257. Qualcomm and its employees and agents attempted to steer the IEEE 802.20 working group toward adopting Qualcomm technology for the IEEE 802.20 standard.
- 258. The 802.20 working group, however, had been moving toward adopting a competing technology Flash-OFDM developed by Flarion Technologies, Inc. ("Flarion").
- 259. Throughout the summer of 2005, Flarion and other members of the 802.20 working group sought the rapid standardization of Flarion's Flash-OFDM technology.
- 260. Qualcomm took several improper steps to prevent the 802.20 working group from adopting Flarion's Flash-OFDM technology in an attempt to unfairly influence the IEEE 802.20 working group to adopt Qualcomm's technology instead of Flarion's technology.
- 261. Qualcomm engaged in multiple acts of misconduct. First, Qualcomm improperly sent as many as twenty employees and consultants as representatives to cast multiple votes on its behalf and in opposition to Flarion's proposed technology at IEEE 802.20 working group meetings.

  Many of these representatives failed to disclose their financial relationships with Qualcomm.
- 262. Second, Qualcomm paid Jerry Upton, the chairman of the IEEE 802.20 working group, as an "independent consultant." Neither Qualcomm nor Mr. Upton timely disclosed this financial relationship to the IEEE 802.20 working group.
- 263. Finally, in August 2005, Qualcomm announced its intention to acquire Flarion the proponent of the competing technology Qualcomm had originally opposed because it competed with Qualcomm's technology. Qualcomm closed on its acquisition of Flarion in January 2006.
- 264. Even before Qualcomm closed the Flarion acquisition, it illegally began to control Flarion's operations. The Department of Justice brought an action against Qualcomm for

violation of the Hart-Scott-Rodino Act, which the parties resolved through a settlement involving Qualcomm paying \$1.8 million in penalties for its illegal conduct.

265. As a result of Qualcomm's deceptive conduct and violations of IEEE rules, the IEEE suspended the IEEE 802.20 working group on June 8, 2006. Among the reasons for the suspension was Qualcomm's improper "dominance" of the working group and, as a result of the failure of the Qualcomm agents to declare their affiliation, a "lack of transparency." Specifically, the IEEE Standards Board Chair reported that:

The decision to suspend 802.20 was made primarily for two reasons. First, the Working Group has been the subject of several appeals from the very beginning of the group, with three appeals now pending at one level or another, and recent activity in the group appears to have become highly contentious—significantly beyond what is normally experienced in IEEE-SA. Second, a preliminary investigation into the group's operation revealed a lack of transparency, possible "dominance," and other irregularities in the Working Group.

- 266. The suspension of a working group was an unprecedented step by the IEEE, and has delayed the adoption of an industry standard.
- 267. Broadcom invested significant time and resources in attending 802.20 related meetings and had planned and intended to develop products for 802.20 applications compliant with the 802.20 standard once adopted.
- 268. Qualcomm's manipulation of the standards-setting process wasted Broadcom's investment of time and resources and has prevented Broadcom from developing products compliant with the 802.20 standard. Had Qualcomm not manipulated the standard-setting process, the IEEE would have developed the 802.20 standard, demand would have developed for 802.20 standard compliant products, and Broadcom would have been able successfully to develop and bring to market products to satisfy that demand.

#### D. CDMA 2000 EVDV

- 269. Another example of Qualcomm's efforts improperly to manipulate SDOs is Qualcomm's conduct to ensure that the 3G CDMA standard has taken the form Qualcomm prefers.
- 270. In the course of discussions within 3GPP2 about the path for 3G development of CDMA, Qualcomm advocated adoption of Qualcomm's preferred "High Data Rate (HDR)" technology, which later became known as CDMA2000-1xEVDO (or "Single Carrier Evolution, Data Only") ("EVDO"). Qualcomm competitors supported a more flexible technology eventually known as CDMA2000-1xEVDV (or "Single Carrier Evolution, Data and Voice") ("EVDV"), that provides both voice and data signals over a single carrier frequency. Qualcomm undertook a course of conduct designed to cause 3GPP2 to adopt the EVDO standard that Qualcomm preferred, and to stall the development and adoption of EVDV. In doing so, Qualcomm intended to protect its technological and market lead in EVDO technology, and to avoid competition on the merits between EVDO and the more advanced EVDV.
- 271. As with the other SDOs relevant to this action, the membership of 3GPP2 includes not only owners of patents relevant to prospective standards and prospective manufacturers of the cell phones implementing new standards, but also the manufacturer customers for chipsets.

  Qualcomm's dominant position in current CDMA chipset sales, as well as its control over vital inputs for CDMA chipsets and cell phones, gives it tremendous leverage over many such members of 3GPP2. In part through the use of this leverage, Qualcomm was able to delay the standardization of EVDV, enabling Qualcomm's EVDO technology to maintain Qualcomm's CDMA chipset dominance.
- 272. Among other things, Qualcomm delayed and distorted the standards competition between EVDO and EVDV by using Qualcomm's power over cell phone manufacturers and others to induce them to withhold or withdraw support from technical proposals embracing EVDV (or the

technology from which EVDV evolved). Qualcomm threatened 3GPP2 members with CDMA chipset price increases or supply cutbacks so that the members would support Qualcomm's desired outcomes. Qualcomm's threats, which were effective because of manufacturers' overriding concerns with short-term competition with other cell phone manufacturers, had their intended effect: manufacturer members that supported alternative technologies abruptly changed their positions. In addition, Qualcomm promoted a detailed testing and measurement methodology for EVDV which Qualcomm represented would take six months to complete but, due to Qualcomm's delaying tactics, lasted over two years.

- 273. After the EVDV standard was finally approved, Qualcomm continued its attempt to delay and thwart the development of that standard to maintain its CDMA chipset dominance. For example, Qualcomm withheld supplies of CDMA chipsets from at least one customer in an attempt to induce the customer to abandon the EVDV standard.
- 274. In February 2005, Qualcomm declared victory in its campaign to delay and kill EVDV by announcing that Qualcomm was excluding EVDV chipsets from its future product plans.

  Qualcomm cited a lack of industry support for EVDV, for which Qualcomm's unlawful conduct was responsible.

#### CLAIMS FOR RELIEF

## FIRST CLAIM FOR RELIEF

## Monopolization of the WCDMA Technology Markets in Violation of Section 2 of the Sherman Act

- 275. Plaintiff Broadcom repeats and realleges all of the allegations in all the paragraphs above as if set forth fully herein.
- 276. By such acts, practices, and conduct, Qualcomm has unlawfully monopolized the WCDMA technology markets by inducing the relevant SDOs to adopt 3G standards that

incorporate Qualcomm's patents as an essential element, relying on Qualcomm's promise to observe FRAND licensing and the relevant SDO IPR disclosure policies, and then not acting in accordance with those promises, all in violation of Section 2 of the Sherman Act, 15 U.S.C. § 2.

- 277. Qualcomm has likewise maintained that monopoly through its licensing and other practices described herein.
- 278. By reason of Qualcomm's violations of Section 2 of the Sherman Act, Broadcom has been injured in its business or property including through the loss of past, present and future profits, by the loss of customers and potential customers, by the loss of goodwill and product image, and by the prospective destruction of its UMTS chipset business.
- 279. Broadcom has suffered irreparable injury by reason of the acts, practices and conduct of Qualcomm alleged above, and will continue to suffer such injury until and unless the Court enjoins such acts, practices and conduct.

#### SECOND CLAIM FOR RELIEF

# Attempted Monopolization of the UMTS Chipset Market in Violation of Section 2 of the Sherman Act

- 280. Plaintiff Broadcom repeats and realleges all of the allegations in all the paragraphs above as if set forth fully herein.
- 281. The global UMTS chipset market is a relevant antitrust market. Qualcomm has willfully engaged, and is illegally engaging, in a cumulative course of conduct, including without limitation: (i) refusing to abide by FRAND licensing commitments made to SDOs in the United States and other countries, after having induced those organizations to adopt technological standards necessitating the use of Qualcomm WCDMA patents that Qualcomm has described as essential; (ii) refusing to provide to Broadcom a license on FRAND terms to Qualcomm patents that Qualcomm has stated are essential to UMTS chipsets and cell phones, and demanding that

Broadcom agree to unfair, discriminatory, and patently unreasonable terms that are aimed to cripple Broadcom as a UMTS chipset competitor; (iii) by failing timely to disclose its purportedly essential IPR to SDOs, which IPR SDOs purportedly incorporated as essential to the UMTS standard; (iv) providing discounts on the excessive royalties it charges cell phone manufacturers for use of its patents only if a licensee purchases Qualcomm chipsets; (v) providing cell phone manufacturers with multi-million dollar marketing funds and/or other incentives, conditioned on the use of Qualcomm's UMTS chipsets; (vi) waiving upfront licensing fees for its intellectual property, conditioned on the use of Qualcomm's UMTS chipsets; and (vii) using threats regarding 2G and 3G CDMA chipset supply and pricing to coerce cell phone manufacturers into purchasing Qualcomm's UMTS chipsets. These practices have no legitimate business justification.

- 282. Qualcomm has undertaken this course of conduct with the specific intent of monopolizing the UMTS chipset market. There is a dangerous probability that, unless restrained, Qualcomm's course of conduct will succeed, in violation of Section 2 of the Sherman Act, 15 U.S.C. § 2.
- 283. By reason of Qualcomm's violations of Section 2 of the Sherman Act, Broadcom has been injured in its business or property including through the loss of past, present and future profits, by the loss of customers and potential customers, by the loss of goodwill and product image, and by the prospective destruction of its UMTS chipset business.
- 284. Broadcom has suffered irreparable injury by reason of the acts, practices and conduct of Qualcomm alleged above, and will continue to suffer such injury until and unless the Court enjoins such acts, practices and conduct.

## THIRD CLAIM FOR RELIEF

## Monopolization of GSM, GPRS, and EDGE Technology Markets in Violation of Section 2 of the Sherman Act

- 285. Plaintiff Broadcom repeats and realleges all of the allegations in all the paragraphs above as if set forth fully herein.
- 286. By such acts, practices, and conduct, Qualcomm has unlawfully monopolized the markets for providing the functionality that its purportedly essential GSM, GPRS, and EDGE IPR covers by failing to disclose timely its purportedly essential IPR to ETSI, which IPR ETSI purportedly incorporated in the GSM, GPRS, and EDGE standards as an essential element, in violation of Section 2 of the Sherman Act, 15 U.S.C. § 2.
- 287. By reason of Qualcomm's violations of Section 2 of the Sherman Act, Broadcom has been injured in its business or property including through the loss of past, present and future profits, by the loss of customers and potential customers, by the loss of goodwill and product image, and by the prospective destruction of its GSM/GPRS/EDGE chipset business.
- 288. Broadcom has suffered irreparable injury by reason of the acts, practices and conduct of Qualcomm alleged above, and will continue to suffer such injury until and unless the Court enjoins such acts, practices and conduct.

## FOURTH CLAIM FOR RELIEF

## **Breach of Contract**

- 289. Plaintiff Broadcom repeats and realleges all of the allegations in all the paragraphs above as if set forth fully herein.
- 290. As set forth above, Qualcomm entered into actual or implied contractual commitments with ETSI, the ITU, ATIS, ARIB, ISO/IEC, and the JVT, relating to the GSM, GPRS, EDGE, UMTS, and H.264 standards.

- 291. Each participant in the standard-setting process for each of these standards including Broadcom was an intended beneficiary of those contracts. Each potential third party implementing each of the standards including Broadcom was also an intended beneficiary of those contracts.
- 292. Qualcomm breached those contracts by failing to timely disclose the IPR that it now claims is essential, in accordance with the IPR disclosure policies, procedures, and practices of the SDOs.
- 293. Qualcomm again breached those contracts by failing to offer to license the IPR that it now claims is essential in accordance with its FRAND commitments.
- 294. In addition, Qualcomm breached its contractual commitments with ANSI and the IEEE related to disclosure of financial relationships with committee members in the IEEE 802.20 working group.
- 295. As a result of those multiple acts of breach, Broadcom has been injured in its business or property through the loss of past, present, and future profits, by the loss of customers and potential customers, and by the loss of goodwill and product image. In addition, Broadcom sustained damages, including the cost of attending 802.20 meetings and lost business opportunities, as a result of Qualcomm's improper influence over the IEEE 802.20 working group.
- 296. Broadcom has suffered and continues to suffer actual damages as a result of Qualcomm's actions.

## FIFTH CLAIM FOR RELIEF

## **Tortious Interference With Prospective Economic Advantage**

- 297. Plaintiff Broadcom repeats and realleges all of the allegations in all the paragraphs above as if set forth fully herein.
- 298. Qualcomm has undertaken a willful and malicious course of conduct to foreclose Broadcom from various commercial opportunities in chipsets that implement the GSM, GPRS, EDGE, UMTS, and H.264 standards.
- 299. Broadcom had a prospective economic relationship with manufacturers of devices that use such chipsets.
- 300. But for Qualcomm's conduct, there was a reasonable probability that Broadcom would have been able to secure business relationships for the sale of such chipsets. Qualcomm intentionally interfered with and frustrated Broadcom's efforts to do so. Qualcomm has done so without legitimate justification or excuse. In sum, Qualcomm has committed multiple acts of tortious interference with Broadcom's prospective economic advantage.
- 301. By reason of Qualcomm's actions, Broadcom has been injured in its business or property including through the loss of past, present and future profits, by the loss of customers and potential customers, and by the loss of goodwill and product image. Broadcom has been injured and suffered damages in an amount to be proved at trial and, without injunctive relief, Broadcom will continue to suffer irreparable injury as a result of Qualcomm's unlawful conduct. Broadcom has no adequate remedy at law. Broadcom is also entitled to punitive damages for Qualcomm's willful and malicious conduct.

## SIXTH CLAIM FOR RELIEF

#### **Promissory Estoppel**

- 302. Plaintiff Broadcom repeats and realleges all of the allegations in all the paragraphs above as if set forth fully herein.
- 303. Qualcomm made a clear and definite promise to potential licensees of its declared essential technology through its promise to various SDOs that it would disclose relevant IPR, including potentially essential patents and would license its essential IPR, including patents, on FRAND terms.
- 304. The intended purpose of Qualcomm's promises was to induce reliance. Qualcomm knew or should have reasonably expected that this promise would induce potential licensees such as Broadcom to take (or refrain from taking) certain actions.
- 305. Broadcom did take action to orient various aspects of its chipset business in reliance on Qualcomm's promises, as described above.
- 306. Broadcom has been harmed as a result of its reasonable reliance on Qualcomm's promises because of Qualcomm's failure to disclose and its failure to license its technology on FRAND terms as it had promised.
- 307. Qualcomm is estopped from reneging on these promises to the various SDOs under the doctrine of promissory estoppel.

#### SEVENTH CLAIM FOR RELIEF

## Fraud

308. Plaintiff Broadcom repeats and realleges all of the allegations in all the paragraphs above as if set forth fully herein.

- 309. Qualcomm intentionally failed to disclose its patents with ETSI, the ITU, ATIS, ARIB, ISO/IEC, and the JVT, and intentionally failed to disclose its financial relationship with members of the IEEE 802.20 working group, as alleged with particularity above.
- 310. Qualcomm had a duty to disclose its patents and its financial relationships with committee members to the relevant SDOs and intentionally failed to do so.
- 311. In addition, Qualcomm represented to the SDOs and to the public that if its patented technology were incorporated into the various standards, it would license that technology to all practitioners of the standard on FRAND terms.
- 312. Qualcomm made the foregoing representations knowing them to be false in that it had no intent to license on FRAND terms and with the intent to induce reliance on its representations.

  Qualcomm did not disclose to the SDOs that it had no intention of licensing its technology on FRAND terms.
- 313. Broadcom reasonably and justifiably relied on the standard-setting processes to be fair, in accordance with the rules, policies, and procedures of those organizations. Broadcom reasonably and justifiably relied on Qualcomm fulfilling its obligations, including its obligations pursuant to the applicable IPR disclosure policies. Broadcom had the right to expect that Qualcomm would abide by its obligations to timely disclose any essential IPR and financial relationships and to abide by its FRAND commitments.
- 314. Qualcomm engaged in each of these acts deliberately, willfully, intentionally, and in bad faith, with the intent to deceive the SDOs and their members, so that the SDOs and their members would adopt Qualcomm IPR into standards.
- 315. Broadcom sustained damages as a result of Qualcomm's failure to disclose its purportedly essential patents, Qualcomm's subsequent refusal to license those patents on

FRAND terms, and Qualcomm's failure to disclose financial relationships relating to the 802.20 working group.

- 316. By the actions described above, Qualcomm has committed multiple acts of fraud.
- 317. The acts and conduct of Qualcomm alleged hereinabove constituted intentional misrepresentation or concealment of material facts known to Qualcomm and were in conscious disregard of Broadcom's rights, were malicious, willful, fraudulent and oppressive, and were done with the intention of causing injury to Broadcom, so as to justify an award of exemplary and punitive damages in an amount to be proven at trial.

## **EIGHTH CLAIM FOR RELIEF**

## Violations of Section 17200 of the California Business and Professions Code

- 318. Plaintiff Broadcom repeats and realleges all of the allegations in all the paragraphs above as if set forth fully herein.
- 319. By the acts alleged, Defendants have engaged in unfair competition within the meaning of Section 17200 of the California Business and Professions Code.
- 320. Specifically, Qualcomm's conduct in connection with ETSI, the ITU, ATIS, ARIB, ANSI, ISO/IEC, and the JVT, and the IEEE 802.20 working group and its claim of ownership of intellectual property rights in the GSM, GPRS, EDGE, UMTS, and H.264 standards constitute: (1) unlawful business acts or practices; (2) unfair business acts or practices, including unfair business practices violating the policy or spirit of the antitrust laws, and otherwise significantly threatening and harming competition in California and elsewhere; and (3) fraudulent business acts or practices.
- 321. Qualcomm committed unlawful business acts or practices by breaching the contracts described above.

- 322. Qualcomm committed unfair and deceptive business acts or practices by failing to disclose purported intellectual property rights in violation of the IPR disclosure obligations, then claiming during licensing discussions with Broadcom and/or Broadcom's customers that it owned patents essential to the GSM, GPRS, EDGE, UMTS, and H.264 standards. In addition, Qualcomm committed unfair business acts or practices by failing to offer a license to its IPR on FRAND terms. Qualcomm also committed unfair business acts or practices in its conduct before the IEEE 802.20 working group, by attempting improperly to influence the technical content of the IEEE 802.20 standard. Qualcomm's repeated nondisclosure before multiple SDOs, and in connection with multiple standards, constitutes a pattern of unfair business practices. Each of these acts and practices is unfair in the circumstances when the effect of the act or practice on Broadcom is balanced against Qualcomm's reasons, justifications, and motives.
- 323. The acts complained of above violate and threaten to violate the policy or spirit of the antitrust laws, and otherwise significantly threaten and/or harm competition. The global Qualcomm GSM, GPRS, EDGE, UMTS, and H.264 technology markets are relevant antitrust markets, as described above. By the deceptive acts, practices, and conduct alleged above, Qualcomm has monopolized or, in the alternative, is attempting with specific intent to monopolize each of those markets by inducing the relevant SDOs to adopt standards that incorporate technologies that read on Qualcomm's purportedly essential patents, but failing to disclose those patents, in violation of the SDOs' IPR disclosure policies, and refusing to offer licenses to its patents on FRAND terms and in violation of its commitments to the SDOs.
- 324. Qualcomm's nondisclosure of its patents, and its attempts to improperly influence the IEEE 802.20 working group, as alleged with particularity above, also constitute fraudulent business acts or practices. Qualcomm had a duty to disclose its patents and its financial

relationships with committee members to the relevant SDOs. Qualcomm deliberately and intentionally breached this duty by concealing information from the SDOs in violation of its obligations under the SDOs' disclosure policies. Specifically, Qualcomm failed to timely disclose its purportedly essential GSM, GPRS, EDGE, and UMTS patents, failed to timely disclose its purportedly essential H.264 patents, and failed to timely disclose its financial relationships with committee members to the 802.20 working group. Qualcomm engaged in each of these acts deliberately and with the intent to deceive the SDOs, so that the SDOs would unknowingly adopt Qualcomm IPR into standards. In addition, although Qualcomm committed to license its declared essential patents on FRAND terms, as described above, it has not done so and its commitment to do so was deceptive and fraudulent.

- 325. As a direct, proximate, and foreseeable result of Qualcomm's wrongful conduct, as alleged above, Broadcom has suffered harm, including the inclusion of undisclosed IPR in the standards, the unavailability of FRAND licenses despite Qualcomm's assurance that it would offer such FRAND licenses, a reduction in Broadcom's ability to make sales of standards-compliant products, a reduction in Broadcom's profits, and a diminution of Broadcom's ability to develop and market semiconductors for GSM, GPRS, EDGE, UMTS, H.264, and 802.20-compliant products.
- 326. As a direct, proximate, and foreseeable result of Qualcomm's wrongful conduct, as alleged above, competition in markets for various functionalities in the GSM, GPRS, EDGE, UMTS, H.264, and 802.20 standards as well as in markets for products that practice those standards has been injured, thereby causing harm to consumers in California and elsewhere.
- 327. By reason of Qualcomm's violations of Cal. Bus. & Prof. Code § 17200, et seq., Broadcom has been injured in its business and property including through the loss of past,

present, and future profits, by the loss of customers and potential customers, and by the loss of goodwill and product image.

- 328. Broadcom has suffered irreparable injury by reason of the acts, practices, and conduct of Qualcomm alleged above and will continue to suffer such injury until and unless the Court enjoins such acts, practices, and conduct. Broadcom is informed and believes that Qualcomm will continue to do the acts alleged herein unless the Court orders Qualcomm to cease and desist.
- 329. Broadcom is entitled to relief, including an injunction and full restitution and/or disgorgement of all revenues, earnings, profits, compensation, and benefits that may have been obtained by Qualcomm from Broadcom, its actual customers, and its potential customers as a result of such unfair business acts or practices.

#### PRAYER FOR RELIEF

WHEREFORE, plaintiff Broadcom requests that the Court:

- A. Adjudge and decree that Qualcomm has violated Section 2 of the Sherman Act, 15 U.S.C. § 2; and that Qualcomm has tortiously interfered with Broadcom's prospective economic advantage; that Qualcomm's conduct constitutes breach of contract, promissory estoppel, and fraud; and that Qualcomm has violated Section 17200 of the California Business and Professions Code;
- B. On Broadcom's First through Third claims for relief, enter judgment against Qualcomm for treble the amount of Broadcom's damages as proven at trial in accordance with Section 4 of the Clayton Act, 15 U.S.C. § 15;
- C. On plaintiff Broadcom's Fourth through Seventh claims for relief, enter judgment against Qualcomm for the amount of Broadcom damages as proven at trial and, on Broadcom's Fifth and Seventh claims for relief, for punitive damages;

D. Enjoin Qualcomm's continuing violations of law by (a) barring Qualcomm from

asserting the patents and other IPR that it has claimed are essential to practice the UMTS, GSM,

GPRS, EDGE, and H.264 standards against parties manufacturing or selling products compliant

with those standards and standards that evolve from those standards; or (b) requiring Qualcomm

to grant Broadcom a license to those patents and other IPR on FRAND terms;

Enter further equitable relief as necessary or appropriate, including full restitution E.

to Broadcom and/or disgorgement of all revenues, earnings, profits, compensation, and benefits

that may have been obtained by Qualcomm from Broadcom, its actual customers, and its

potential customers as a result of such unfair business acts or practices.;

F. Award plaintiff Broadcom its costs and expenses of litigation, including

attorneys' fees and expert witness fees; and

Enter judgment against Qualcomm for such other and further relief as the Court G.

deems just and proper.

**DEMAND FOR JURY TRIAL** 

Plaintiff Broadcom Corporation hereby demands trial by jury in this action on all issues

so triable.

Dated: November 2, 2007

Respectfully submitted,

s/Robert A. Magnanini

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## **CERTIFICATE OF SERVICE**

I, Robert A. Magnanini, hereby certify that the foregoing Second Amended Complaint, which was filed and served electronically on November 2, 2007 on counsel for all named parties through the Court's *ECF system*, including:

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